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**O'Loughlin et al.**

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(54) **APPARATUS FOR AUDIBLY  
COMMUNICATING SPEECH USING THE  
RADIO FREQUENCY HEARING EFFECT**

(58) **Field of Search** ..... 332/167; 381/151;  
607/56, 55; 340/384.1; 600/559, 23, 586;  
128/897, 898

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(51) **Int. Cl.<sup>7</sup>** ..... **H03C 1/54**

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381/151; 600/586

(57) **ABSTRACT**

A modulation process with a fully suppressed carrier and  
input preprocessor filtering to produce an encoded output;  
for amplitude modulation (AM) and audio speech prepro-  
cessor filtering, intelligible subjective sound is produced  
when the encoded signal is demodulated using the RF  
Hearing Effect. Suitable forms of carrier suppressed modu-  
lation include single sideband (SSB) and carrier suppressed  
amplitude modulation (CSAM), with both sidebands  
present.

**11 Claims, 3 Drawing Sheets**

